

# RECEIVED KING COUNTY INDUSTRIAL WASTE

Anchor Environmental, L.L.C. 1423 3rd Avenue, Suite 300 Seattle, Washington 98101 Phone 206.287.9130 Fax 206.287.9131

### Memorandum

To:

**Bruce Tiffany** 

From: David Gillingham

cc:

Dan Hennessy

Jeff Stern

Date: September 21, 2006

Re:

King County International Airport Catch Basin Sampling

This memorandum briefly describes the King County International Airport catch basin sampling performed by Anchor Environmental personnel on September 19, 2006. David Gillingham and Liz Vonckx from Anchor Environmental collected the sediments from the catch basins indicated on the map provided by the King County Industrial Waste Program following the methods prescribed in the sampling and analysis plan dated September 14, 2006.

On the day of sampling, locally heavy rain fell prior to the initiation of sampling but stopped at approximately 0900. Storm water flow was high in the first sample location, 1491, but did not impede sample collection. Samples were collected using the 4-liter stainless steel beakers and the extension pole provided by KCEL. Each catch basin had between 1 and 2 feet of water in the basin so that sediment was not visible from above. The samples were obtained by carefully lowering the beaker to the bottom and scrapping the bottom of the catch basin. Generally, each catch basin had very little material on the bottom so that most samples were obtained from the corners of the basins. Several grabs from each basin were required to obtain enough material to fill the sample jars. After settling, the overlying water was slowly decanted off each grab and sediment obtained from each was composited in a bowl.

Insufficient sediment to obtain a sample was encountered in catch basin 1139. In three basins, 1126, 1130, and 1160, only enough material was obtained to fill one jar, the SVOC jar. Two jars were filled at 1752, SVOC and TS/TOC. The chain-of-custody form lists the number of jars at each location. All samples jars were placed in plastic zip-lock bags in a cooler with ice

immediately after collection and held under ice until delivery to the KCEL on September 20, 2006.

1.37

Oily sheen was observed in all catch basins generally, however, the heaviest sheen and petroleum odor was observed in the catch basins near the edge of Taxiway A in catch basins 1140, 1153, 1172, 1175, and 1184. In these samples particularly, increased sheen was observed as the sediment was disturbed during sampling and sheen was prominent in the composite bowl. One sample, from catch basin 1166 had a layer of light gray to white, slurry like material over the top of the blacker organic material typical in all the other catch basins. The material was very soft and similar in appearance to concrete washing residue. Field data logs from sediment collection of all catch basins are attached to his memo.

Sampled: 9/19/06 Shipped: 9/20/06

roject Name: KCIA	Outon Buom	Project No:							
Sampling Crew: Dav	vid Gillingham, Liz Vonckx	Sampling Method: Hand Collection							
Sample Number: KCIA	1-1491-091906	Penetration/Samp	oled Depth:		Time: 083				
Chemistry/Archive (circle o		,	1						
Sediment Type:	Sediment Color:	Sediment Odor:		Sheen:	- · · · · · · · · · · · · · · · · · · ·				
Surface:	Surface:	none)	H2S	mone) PG					
Sand	Brown, Dark	slight	Petroleum	slight					
Subsurface:	Subsurface: Gray	moderate	other:	moderate					
	/	strong		heavy					
		lovonubolmina		1					
Additional Comments:	Ift of water nt of organ, water in	COLLER	cedime	17 10	C/R				
Small amore	at discount	- 1.6-	is So	me ske	en obser				
Charles	The state of the s	(1) 10	3	avab	buckete				
in thousing	Warke In	CD, 40	0 /-1	7, 4, 5					
ofter 60	// ec Doin								
Sample Number: KC LM	1-1126-091906	Penetration/Samp	oled Depth:		Time: <u>09/5</u>				
Chemistry/Archive (circle o	<del></del>								
Sediment Type:	Sediment Color:	Sediment Odor:		Sheen:					
Surface:	Surface:	Troite	H2S	none					
Sand	Brown	slight	Petroleum	(slight)					
Subsurface:	Subsurface:	moderate	other:	moderate					
		strong		heavy					
	<b>{</b>	overwhelming							
only SVO	very little mo intent. Sample overlying wa DC Ta- Fill- DA-1130-091906	iterial interior			114 high CB. Som Time: 0940				
only SVO	CA=1130-091906	iterial interior							
Sample Number: KC_ Chemistry/Archive (circle of Sediment Type:	TA = //30 - 04,406  (ne)  Sediment Color:	ter of Penetration/Samp Sediment Odor:							
Sample Number: KC_ Chemistry/Archive (circle of Sediment Type:	TA = //30 - 04,406  (ne)  Sediment Color:	Penetration/Samp		Sheen:					
Sample Number: KC_ Chemistry/Archive (circle of Sediment Type:	TA = //30 - 091906  Sediment Color:  Surface: Grey Brown	ter of Penetration/Samp Sediment Odor:	oled Depth:	Sheen:					
Sample Number: KC_ Chemistry/Archive (circle of Sediment Type:	TA = //30 - 04,406  (ne)  Sediment Color:	Penetration/Samp	oled Depth:	Sheen:					
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Cample Number: KC_ Chemistry/Archive (circle of Sediment Type: Surface: Organic Gubsurface: Luff	TA = //30 - 094906  Sediment Color:  Surface: Grey Brown  Subsurface:	Penetration/Samp Sediment Odor: none slight moderate strong overwhelming	H2S Petroleum other:	Sheen: none slight moderate heavy	Time: <u>094</u> 0				
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Sample Number: KC_ Chemistry/Archive (circle of Sediment Type: Surface: Organic Subsurface: Luff Additional Comments: Slight Flot	CA-/130-091906  Sediment Color: Surface: Grey/Brown Subsurface: Sheen observed Very lit	Penetration/Samp Sediment Odor: (none) slight moderate strong overwhelming On Wall	H2S Petroleum other:	Sheen: (none) slight moderate heavy	Time: <u>094</u> 0				
Sample Number: KC_ Chemistry/Archive (circle of Sediment Type: Surface: Organic Subsurface: Luff Additional Comments: Slight Flot	CA-/130-091906  Sediment Color: Surface: Grey/Brown Subsurface: Sheen observed Very lit	Penetration/Samp Sediment Odor: (none) slight moderate strong overwhelming On Wall	H2S Petroleum other:	Sheen: (none) slight moderate heavy	Time: <u>094</u> C				
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Sample Number: KC Chemistry/Archive (circle of Sediment Type: Surface: Organic Subsurface: Luff Additional Comments: Slight floor SVOC Jar Sample Number: KC	CA-1/30-091906  Rediment Color:  Surface: Grey Brown  Subsurface:  Sheen observed  Very lit.  Only  LA-1/39-091906	Penetration/Samp Sediment Odor: (none) slight moderate strong overwhelming On Way Ar Sediment	H2S Petroleum other:	Sheen: none slight moderate heavy	Time: <u>094</u> C				
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Sample Number: KC_Chemistry/Archive (circle of Sediment Type: Surface: Organic Subsurface: Vight for the Subsurface: Subsurface: Vight for the Subsu	Sediment Color: Surface: Grey Brown Subsurface:  Sheen observed Very lity Only.  IA-1139-091906  Sediment Color: Surface: Subsurface: Subsurface:	Penetration/Samp Sediment Odor: none slight moderate strong overwhelming Penetration/Samp Sediment Odor: none slight moderate strong overwhelming on was penetration/Samp sediment Odor: none slight moderate strong overwhelming	H2S Petroleum other:  H2S Petroleum other:  H2S Petroleum other:	Sheen: none slight moderate heavy  Sheen: none slight moderate heavy	Time: <u>094</u> C				
Sample Number: KC_ Chemistry/Archive (circle of Sediment Type: Surface: Organic Subsurface: Additional Comments: Sight Floring	Sediment Color:  Surface: Groy Brown  Subsurface:  Sheen observed  Very 1:th  Only.  TA-1139-091906  ine)  Sediment Color:  Surface:	Penetration/Samp Sediment Odor: none slight moderate strong overwhelming Penetration/Samp Sediment Odor: none slight moderate strong overwhelming on was penetration/Samp sediment Odor: none slight moderate strong overwhelming	H2S Petroleum other:  H2S Petroleum T	Sheen: none slight moderate heavy  Sheen: none slight moderate heavy	Time: <u>094</u> 0				
Sample Number: KC_ Chemistry/Archive (circle of Sediment Type: Surface: Organic Subsurface:  Additional Comments: Sight Flot  SVOC Jar  Sample Number: KC  Chemistry/Archive (circle of Sediment Type: Surface  Subsurface:	Sediment Color: Surface: Grey Brown Subsurface:  Sheen observed Very lity Only.  IA-1139-091906  Sediment Color: Surface: Subsurface: Subsurface:	Penetration/Samp Sediment Odor: none slight moderate strong overwhelming Penetration/Samp Sediment Odor: none slight moderate strong overwhelming on was penetration/Samp sediment Odor: none slight moderate strong overwhelming	H2S Petroleum other:  H2S Petroleum other:  H2S Petroleum other:	Sheen: none slight moderate heavy  Sheen: none slight moderate heavy	Time: <b>094</b> C				

Sampled: 9/19/06 Shipped: 9/20/06

roject Name: KCIA Catch Basin		
Sampling Crew: David Gillingham, Liz Vonckx	Sampling Method: Hand Collecti	ion
Sample Number: KCIA - 1140 - 091906	Penetration/Sampled Depth:	Time: 1010
Chemistry/Archive (circle one)		11110. 7-7-
Sediment Type: Sediment Color:	Sediment Odor:	Sheen:
Surface: lots of Surface: Dark organic material Subsurface: and leaves	none H2S	none in sediment
organic material pagray	slight (Petroleum)	slight
Subsurface: and Subsurface:	moderate other:	moderate and overlyin heavy water
leaves	strong	heavy water.
	overwhelming	
Additional Comments: oily sheen in Sheen increused with d	water flowing	ng Into CB.
shoon increased with d	listarbance,	
JACCH C - J		
Sample Number: VCIA - 1153-09/906	Penetration/Sampled Depth:	Time: /045
Chemistry/Archive (circle one)	Tonovation/odinplos Dopan	Time. 7077
	Sediment Odor:	Sheen:
Sediment Type: Sediment Color: Surface: Sand with Surface: Black Surface: Slack Surface: Slack Surface: Slack	none H2S	none
organic. Black	slight (Petroleum	slight
Subsurface. Joubsurface.	moderate other:	proderate
top	strong	(heavy
	overwhelming	
Additional Comments: CB Full. 5	Leen on surf	aco and Petroleum
additional comments.	7	
Challe all	10010	change are complex
smelly. Oil boon in		
oil sheen observed on sample Number: KIIIA-1160-091906		
Oil Sheen observed on Sample Number: KTTA - 1160-091906 Chemistry/Archive (circle one)	tarmac flourin Penetration/Sampled Depth:	9 into CB. Time: 1/15
Sample Number: KTTA - 1160 - 091906 Chemistry/Archive (circle one) Sediment Type:   Sediment Color:	Penetration/Sampled Depth:	5 in to CB. Time: ///5 Sheen:
Sample Number: KTTA - 1160 - 091906 Chemistry/Archive (circle one) Sediment Type:   Sediment Color:	Penetration/Sampled Depth:	9 /n to CB. Time: ///5
Sample Number: KTTA - 1160 - 091906 Chemistry/Archive (circle one) Sediment Type:   Sediment Color:	Penetration/Sampled Depth:	Sheen: none
Oil Sheen observed on Sample Number: KTTA - 1160-091906 Chemistry/Archive (circle one)	Penetration/Sampled Depth:  Sediment Odor:  Thone H2S Slight Petroleum moderate other:	Sheen: none slight moderate
Sample Number: KTTA - 1160 - 091906 Chemistry/Archive (circle one) Sediment Type:   Sediment Color:	Penetration/Sampled Depth:  Sediment Odor:  Tione H2S Slight Petroleum moderate other: strong	Sheen: none
Sample Number: LTT - 1160-091906 Chemistry/Archive (circle one) Sediment Type: Sourface: Sandy With organic Subsurface: debnis Subsurface: Flecks	Penetration/Sampled Depth:  Sediment Odor:  Tione H2S Slight Petroleum moderate other:	Sheen: none slight moderate heavy
Sample Number: KET/1-1160-091906 Chemistry/Archive (circle one) Sediment Type: Sourface: Sandy Surface: Black w. Subsurface: debn, s Subsurface: Subsurface:	Penetration/Sampled Depth:  Sediment Odor:  Tione H2S Slight Petroleum moderate other:	Sheen: none slight moderate heavy
Sample Number: LTT - 1160-091906 Chemistry/Archive (circle one) Sediment Type: Sourface: Sandy With organic Subsurface: debnis Subsurface: Flecks	Penetration/Sampled Depth:  Sediment Odor:  Tione H2S Slight Petroleum moderate other:	Sheen: none slight moderate heavy
Sample Number: LTT - 1160-091906 Chemistry/Archive (circle one) Sediment Type: Sourface: Sandy With organic Subsurface: debnis Subsurface: Flecks	Penetration/Sampled Depth:  Sediment Odor:  Tione H2S Slight Petroleum moderate other:	Sheen: none slight moderate heavy
Sample Number: KE FA - 1160 - 091906 Chemistry/Archive (circle one) Sediment Type: Surface: Sandy Surface: Black with organic white flecks Subsurface: debnis Subsurface:  Additional Comments: Very little fi Sheen on Tarmee run Surface In CB.	Penetration/Sampled Depth:  Sediment Odor:  Thone H2S Slight Petroleum Imoderate other: strong overwheiming  Our in CB.	Sheen: none slight moderate heavy  sery I the Sedin. oily sheem on
Sample Number: KE FA - 1160 - 091906 Chemistry/Archive (circle one) Sediment Type: Surface: Sandy Surface: Black with organic white flecks Subsurface: debnis Subsurface:  Additional Comments: Very little fi Sheen on Tarmee run Surface In CB.	Penetration/Sampled Depth:  Sediment Odor:  Thone H2S Slight Petroleum Imoderate other: strong overwheiming  Our in CB.	Sheen: none slight moderate heavy  sery I the Sedin. oily sheem on
Sample Number: LTT - 1160-091906 Chemistry/Archive (circle one) Sediment Type: Sourface: Sandy With organic Subsurface: debnis Subsurface: Flecks	Penetration/Sampled Depth:  Sediment Odor:  Thone H2S Slight Petroleum Imoderate other: strong overwheiming  Our in CB.	Sheen: none slight moderate heavy  sery I the Sedin. oily sheem on
Sample Number: LTA - 1160 - 091906 Chemistry/Archive (circle one) Sediment Type: Surface: Sandy Surface: Black with organic white flecks Subsurface: debnis Subsurface:  Additional Comments: Very little fi Sheen on Tarmer run Surface In CB.  Syoc Jar Only Sample Number: 16CTA - 1425 - 091906	Penetration/Sampled Depth:  Sediment Odor:  Thone H2S Slight Petroleum Imoderate other: strong overwheiming  Our in CB.	Sheen: none slight moderate heavy  sery I the Sedin. oily sheem on
Sample Number: LTA - 1160 - 091906 Chemistry/Archive (circle one) Sediment Type: Surface: Sandy Surface: Black in Subsurface: debn, s Subsurface:  Additional Comments: Vary Little Flecks Subsurface: Tarmac run Surface: Debn Tarmac run Surface: Debn Tarmac run Surface: Debn Tarmac run Surface: Subsurface:	Penetration/Sampled Depth:  Sediment Odor:  Tione H2S Slight Petroleum Imoderate other: strong overwhelming  Penetration/Sampled Depth:  Penetration/Sampled Depth:	Sheen: none slight moderate heavy  Jery! Ho Sedin oily sheen on  Time: 1200
Con Skeen observed on sample Number: LA - 160 - 091906 Chemistry/Archive (circle one) Codiment Type: Sediment Color: Surface: Sandy Surface: Black with organic With organic Subsurface: Lecks Codditional Comments: Very Little Flecks Codditional Codditional Comments Codditional Coddi	Penetration/Sampled Depth:  Sediment Odor:  Tione H2S Slight Petroleum moderate other: strong overwhelming  Penetration/Sampled Depth:  Sediment Odor: frone H2S	Sheen: none Slight moderate heavy  Jery ! #/o Sedin oily sheen on  Time: /200
Con Skeen observed on sample Number: LTA - 1160 - 091906 Chemistry/Archive (circle one) Codiment Type: Sediment Color: Courage: Sandy Surface: Black with organic white flecks Coubsurface: debnis Subsurface: Comments: Very little from Sheen on Tarmer run. Sheen on Tarmer run. Sheen on Tarmer run. Comple Number: KCTA - 1425 - 091906 Chemistry/Archive (circle one) Codemic mostly Surface: Black  Coragnic material  Coragnic material	Penetration/Sampled Depth:  Sediment Odor:  Tione H2S Slight Petroleum moderate other: strong overwheiming  Penetration/Sampled Depth:  Sediment Odor: none H2S Sediment Odor: Penetration/Sampled Depth: Sediment Odor: Penetration H2S Slight Petroleum	Sheen: none slight moderate heavy  Jery! #//o Sedin oily Sheen on  Time: /200
Sample Number: KTA - 1160 - 091906 Chemistry/Archive (circle one) Sediment Type: Surface: Sandy Surface: Black w.  Subsurface: debn, s Subsurface: Tarmee Flecks Subsurface: Tarmee Flecks Subsurface: Tarmee Flecks Subsurface: Subsubsubsubsubsubsubsubsubsubsubsubsubsu	Penetration/Sampled Depth:  Sediment Odor:  Thone H2S Slight Petroleum moderate other: strong overwheiming  Penetration/Sampled Depth:  Sediment Odor:  None H2S Slight Petroleum moderate other:	Sheen: none slight noderate heavy  Time: ///S  Sheen: none Slight Time: /200
Sample Number: KTA - 1160 - 091906 Chemistry/Archive (circle one) Sediment Type: Surface: Sandy Subsurface: Alack and Subsurface: Alack and Subsurface: Surface: Subsurface: Subsubsurface: Subsurface: Subsurface: Subsurface: Subsubsurface: Subsubsurface: Subs	Penetration/Sampled Depth:  Sediment Odor:  Thone H2S Slight Petroleum moderate other: strong overwheiming  Penetration/Sampled Depth:  Sediment Odor:  Thone H2S Sight Petroleum moderate other: strong	Sheen: none slight moderate heavy  Jery! #//o Sedin oily Sheen on  Time: /200
Sample Number: LA - 160 - 091906 Chemistry/Archive (circle one) Sediment Type: Surface: Sandy Subsurface: Black in Subsurface: debn, s Subsurface:  Additional Comments: Very little fi Subsurface: on Tarmer run Surface on Tarmer run Surface on Sample Number: KCIA - 1425 - 091906 Chemistry/Archive (circle one) Sediment Type: Surface: Mostly Organic material Subsurface: Sludgey  Sludgey  Subsurface: Sludgey	Penetration/Sampled Depth:  Sediment Odor:  Flone H2S Slight Petroleum moderate other: strong overwhelming  Penetration/Sampled Depth:  Sediment Odor:  none H2S Slight Petroleum moderate other: strong overwhelming	Sheen: none slight moderate heavy  Iery ! #/o Sedin Oily Sheem on  Time: /200  Sheen: none slight moderate heavy
Sample Number: KE TA - 1160 - 091906 Chemistry/Archive (circle one) Sediment Type: Surface: Sandy Subsurface: Black with organic white flecks Subsurface: debnis Subsurface:  Additional Comments: Very little from Sheen on Tarmer run. Sheen on Tarmer run. Sheen on Tarmer run. Sheen on Tarmer run. Sheen on Sheen only Sample Number: KCTA - 1425 - 091906 Chemistry/Archive (circle one) Sediment Type: Sediment Color: Surface: mostly Organic material Subsurface: Sines Sludgey Additional Comments: Only Sheen on	Penetration/Sampled Depth:  Sediment Odor:  Flone H2S Slight Petroleum moderate other: strong overwhelming  Penetration/Sampled Depth:  Sediment Odor:  none H2S Slight Petroleum moderate other: strong overwhelming	Sheen: none slight moderate heavy  Sheen: Time: ///S  Time: ///  Sheen: none Slight moderate heavy
Sample Number: KE TA - 1160 - 091906 Chemistry/Archive (circle one) Sediment Type: Surface: Sandy Subsurface: Black with organic white flecks Subsurface: debnis Subsurface:  Additional Comments: Very little from Sheen on Tarmer run. Sheen on Tarmer run. Sheen on Tarmer run. Sheen on Tarmer run. Sheen on Sheen only Sample Number: KCTA - 1425 - 091906 Chemistry/Archive (circle one) Sediment Type: Sediment Color: Surface: mostly Organic material Subsurface: Sines Sludgey Additional Comments: Only Sheen on	Penetration/Sampled Depth:  Sediment Odor:  Flone H2S Slight Petroleum moderate other: strong overwhelming  Penetration/Sampled Depth:  Sediment Odor:  none H2S Slight Petroleum moderate other: strong overwhelming	Sheen: none slight moderate heavy  Iery ! #/o Sedin Oily Sheem on  Time: /200  Sheen: none slight moderate heavy
Sample Number: LA - 160 - 091906 Chemistry/Archive (circle one) Sediment Type: Surface: Sandy Subsurface: Black in Subsurface: debn, s Subsurface:  Additional Comments: Very little fi Subsurface: on Tarmer run Surface on Tarmer run Surface on Sample Number: KCIA - 1425 - 091906 Chemistry/Archive (circle one) Sediment Type: Surface: Mostly Organic material Subsurface: Sludgey  Sludgey  Subsurface: Sludgey	Penetration/Sampled Depth:  Sediment Odor:  Flone H2S Slight Petroleum moderate other: strong overwhelming  Penetration/Sampled Depth:  Sediment Odor:  none H2S Slight Petroleum moderate other: strong overwhelming	Sheen: none slight moderate heavy  Iery ! #/o Sedin Oily Sheem on  Time: /200  Sheen: none slight moderate heavy

	2/1-1-1
Sampled:	9/19/06
Shipped:	9/20/06

	Project No:	020067-01		
d Gillingham, Liz Vonckx	Sampling Method	l; Hand Collecti	on	
1-1184-091906	Danaha lian/Cam	alad Danib.		Time: /250
	renetration/oam		Time: 1230	
<del></del>	Ta # 101		Tai.	
Surface: 3/4c.lc	1		l l	
Subsurface:	1	other:		
	strong		heavy	
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eavy sheen or	n wate	1 541	THE G	no in
1252 001006	Danatus II as /Casas	alad Danib.		- 1215
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<del> </del>	To 8			
Surface: dark,	レン			
olive	1 -		डाकुम	
Subsurface: to Realin	moderate	other:	moderate	
	strong		heavy	
	overwhelming		_1	
	Penetration/Sami	oled Depth:		Time: 1335
	Ta iii a i			
Sediment Color:	Sediment Odor:		Sheen:	
Sediment Color: Surface: c/a / C/ //C		H2S	Sheen:	
Sediment Color: Surface: Clay Slaff	none		none	
Surface: clay Slaff	none slight	Petroleum	none	
Surface: clay Slaff	none slight		none slight moderate	
Surface: clay Slaff Subsurface: Sandy Grit	none Slight moderate strong	Petroleum other:	none slight moderate heavy	
Surface: clay Slaff Subsurface: Sandy Grit	none Slight moderate strong	Petroleum other:	none slight moderate heavy	G. #
Surface: clay Slaff	none Slight moderate strong	Petroleum other:	none slight moderate heavy	gritty
Surface: clay Slaff Subsurface: Sandy Grit	none Slight moderate strong	Petroleum other:	none slight moderate heavy	gritty
Surface: clay Slaff Subsurface: Sandy Grit	none Slight moderate strong	Petroleum other:	none slight moderate heavy	gritty
Surface: clay Slaff Subsurface; Sandy Grit	none slight moderate strong overwhelming	Petroleum other:	none sight moderate heavy	,
Surface: clay Slaff Subsurface: Sandy Grit	none slight moderate strong overwhelming	Petroleum other:	none sight moderate heavy	,
Surface: clay Slaff Subsurface; Sandy Grit	none slight moderate strong overwhelming	Petroleum other:	none sight moderate heavy	,
Surface: clay Slaff Subsurface: SAID, Grit  A-1175-09/906  Sediment Color:	none slight moderate strong overwhelming	Petroleum other:	none sight moderate heavy	,
Surface: clay Slaff Subsurface: SAID, Grit  A-1175-09/906  Sediment Color:	none slight moderate strong overwhelming  F.4 5;//F	Petroleum other:	none sight moderate heavy	,
Surface: clay Slaff Subsurface; Syndy, grit  yer of wh,  A-1175-09/906  Sediment Color: Surface: dark: gray	none Slight moderate strong overwhelming  F. Silf  Penetration/Sam Sediment Odor:	Petroleum other:	none sight moderate heavy  Black  Sheen:	,
Surface: clay Slaff Subsurface: SAID, Grit  A-1175-09/906  Sediment Color:	none Slight moderate strong overwhelming  F. Silf  Penetration/Sam  Sediment Odor: none	Petroleum other:	none sight moderate heavy  Black  Sheen: none	gr. Hy Time: 1410
Surface: clay Slaff Subsurface; Syndy, grit  yer of wh,  A-1175-09/906  Sediment Color: Surface: dark: gray	none slight moderate strong overwhelming  Full String Penetration/Sam Sediment Odor: none slight moderate	Petroleum other:  OVPV  pled Depth:  H2S  Petroleum	none sight moderate heavy  Sheen: none slight moderate	,
Surface: clay Slaff Subsurface; Syndy, grit  yer of wh,  A-1175-09/906  Sediment Color: Surface: dark: gray	none slight moderate strong overwhelming  Fenetration/Sam Sediment Odor: none slight moderate strong	Petroleum other:  OVPV  pled Depth:  H2S  Petroleum	none sight moderate heavy  Black  Sheen: none slight	,
Surface: clay Slaff Subsurface; Sandy Grit  ayer of whi  A-1175-09/906  Bediment Color: Surface: darle gray Subsurface:	none slight moderate strong overwhelming  Full String Penetration/Sam Sediment Odor: none slight moderate	Petroleum other:  OVPV  pled Depth:  H2S  Petroleum	none sight moderate heavy  Sheen: none slight moderate	,
Surface: clay Slaff Subsurface; Syndy, grit  yer of wh,  A-1175-09/906  Sediment Color: Surface: dark: gray	none slight moderate strong overwhelming  Fenetration/Sam Sediment Odor: none slight moderate strong	Petroleum other:  OVPV  pled Depth:  H2S  Petroleum	none sight moderate heavy  Sheen: none slight moderate	,
Surface: clay Slaff Subsurface; Sandy Grit  ayer of whi  A-1175-09/906  Bediment Color: Surface: darle gray Subsurface:	none slight moderate strong overwhelming  Fenetration/Sam Sediment Odor: none slight moderate strong	Petroleum other:  OVPV  pled Depth:  H2S  Petroleum	none sight moderate heavy  Sheen: none slight moderate	,
Surface: clay Slaff Subsurface; Sandy Grit  ayer of whi  A-1175-09/906  Bediment Color: Surface: darle gray Subsurface:	none slight moderate strong overwhelming  Fenetration/Sam Sediment Odor: none slight moderate strong	Petroleum other:  OVPV  pled Depth:  H2S  Petroleum	none sight moderate heavy  Sheen: none slight moderate	,
	Sediment Color: Surface: Blac.lc Subsurface:  Pery Sheen of Sediment Color: Surface: Jark Subsurface: Jark	Sediment Color:  Surface:  Subsurface:  Subsurface:  Subsurface:  Subsurface:  Subsurface:  Subsurface:  Subsurface:  Subsurface:  Subsurface:  Sediment Color:  Sufface:  Subsurface:  Subsubsubsubsubsubsubsubsubsubsubsubsubsu	Penetration/Sampled Depth:	Sediment Color:  Surface: B/uc.lc   Sediment Odor:   Sheen:   Subsurface: B/uc.lc   none   H2S   none   Subsurface:   moderate   other:   moderate   heavy    Pervy Sheen on water Surface   a

Sampled: 9/10/06 Shipped: 9/20/06

Project Name: KCIA	Project No: 020067-01							
Sampling Crew: David Gillingham, Liz Vonckx		Sampling Method: Hand Collection						
Sample Number: KCTA	-1172-091906	Penetration/Samp	led Depth:		Time: <u>/425</u>			
Chemistry/Archive (circle on	_	·	,					
Sediment Type:	Sediment Color:	Sediment Odor:		Sheen:	· · · · · · · · · · · · · · · · · · ·			
Surface: growelly	Surface: Rlack	none	H2S_	none				
Some	Surface: Black Subsurface: gray	slight	Petroleum	slight				
Subsurface:	Subsurface:	noderate	other:	moderate				
		strong	(	heavy				
	<u> </u>	overwhelming		1				
Additional Comments:	very oily.							
Sample Number:		Penetration/Samp	led Depth:		Time:			
Chemistry/Archive (circle on								
Sediment Type:	Sediment Color:	Sediment Odor:		Sheen:				
Surface:	Surface:	none	H2S	none				
		slight	Petroleum	slight				
Subsurface:	Subsurface:	moderate	other:	moderate				
		strong		heavy				
		overwhelming			<u></u>			
Sample Number: Chemistry/Archive (circle or		Penetration/Samp		Time;				
Sediment Type:	Sediment Color:	Sediment Odor:		Sheen:				
Surface:	Surface:	none	H2S	none				
		slight	Petroleum	slight				
Subsurface:	Subsurface;	moderate	other:	moderate				
		strong		heavy				
		overwhelming						
Additional Comments:								
Sample Number:		Penetration/Samp	oled Depth:		Time:			
Chemistry/Archive (circle or	<del></del>	T- : - : - : - : - : - : - : - : - : - :						
Sediment Type:	Sediment Color:	Sediment Odor:		Sheen:				
Surface:	Surface:	none	H2S	none				
Cubarrelana	Cubauriaaa	slight	Petroleum	slight				
Subsurface:	Subsurface:	moderate	other:	moderate				
		strong		heavy				
		overwhelming						
Additional Comments:		<del></del>						
Red	corded by: DG	40						

### LABORATORY WORK ORDER

Project Name: KCIA - Sediment Sampling of Stormwater Structures

Project Number: 423589.090

⊅age 1 J′'

Anchor	Environmen	tal 2	87-9130	Γ		Param	eters						
Sample#	Matrix	Colect Date	Collect Time	PCBs (EPA 8082)	SVOCs (EPA 8270)	Total Organic Carbon (EPA 9060)	Total Solids (SM 2540-G)					No. of Containers	Comments
1A-1491	Stormwater Catch Basin Sediment	9/19/06	0830	. ×	×	×						4	Archive Samples Until Notified by King County/W
1A-1126	Stormwater Catch Basin Sediment	1	0915		X							1	Archive Samples Until Notified by King County/W
IA-1130	Stormwater Catch Basin Sediment		0940		X							1	Archive Samples Until Notified by King County/W
IA- 1/39	Stormwater Catch Basin Sediment		1000				:					0	Archive Samples Until Notified by King County/W
IA- 1140	Stormwater Catch Basin Sediment		1010	X	X	X	~		1			4	Archive Samples Until Notified by King County/W
A- (153	Stormwater Catch Basin Sediment		1045	×		×	×					4	Archive Samples Until Notified by King County/W
IA- 1160	Stormwater Catch Basin Sediment		11 15		X		7		_			1	
1425	Stormwater Catch Basin Sediment		1200	X	X	X	X		-			4	Archive Samples Until Notified by King County/W
14-1184	Stormwater Catch		1250	×	+	X			_			4	Archive Samples Until Notified by King County/W
1A- 1752	Basin Sediment Stormwater Catch		1315	_~	×		X					12	Archive Samples Until Notified by King County/W
IA- 1166	Basin Sediment Stormwater Catch		1335	×	X	X						4	Archive Samples Until Notified by King County/W
IA- 11 06 IA- 11 75	Basin Sediment Stormwater Catch		1410	X	X	1	×					13	Archive Samples Until Notified by King County/W
	Basin Sediment Stormwater Catch				1		X				-	2	Archive Samples Until Notified by King County/W
IA- 1/72	Basin Sediment		1425	<b>×</b>	X	<del> </del>					-	5_	Archive Samples Until Notified by King County/W
	*				-	<del> </del>							
			-						-	*			· · · · · · · · · · · · · · · · · · ·
ditional Comments:	<u> </u>			l	l		}		Tai	tal # of containers		35	
samples to be archived at Kin	an Caraba En incaración			*/>	. T							سدد	J
on plus is so dictivos de la	ig coonly crownerian	Cacoratory district	tilled by filing County/	7 43101710	, reauri	CIT DIVISI	on, contact b	ace fillally (1. 2	70-203-30	) i i) ioi ioi mei qo	5510113.		
INQUISHED BY	/ 11/ 1	,			_ /_ D	ate /	············	RECEIVED	BY		7	11	Date
rolure auch	wellen	>-,			1/2	10	<u>(</u> 830	Signature	<u> </u>	Z/ (	<u>, , , , , , , , , , , , , , , , , , , </u>	77_	- 9/20/06
ted Name David		gham.			Ti	me O	<i>y3</i> 0	Printed Nam		CEL C	: 1	inn	Time <i>830</i>

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